

## **REMARKS**

This amendment is responsive to the Office Action mailed December 27, 2007, wherein the Examiner indicated that Claims 1-38 are pending, of which Claims 3, 4 and 6-38 are withdrawn from consideration, and that Claims 1, 2 and 5 are rejected.

Claim 5 has been amended herein to delete hGhrelin(1-28)-NH<sub>2</sub>, *i.e.*, the native, unmodified human ghrelin. It should be noted that hGhrelin(1-28)-NH<sub>2</sub> can not belong to Claim 5 in view of the fact that Claim 5 depends on Claim 4, and Claim 4 does not include hGhrelin(1-28)-NH<sub>2</sub> in its list of specific compounds of modified human ghrelin analogues. Likewise, Claim 5 ultimately depends on Claim 1, which clearly does not encompass native human ghrelin sequence. For one example, the following *proviso* clause is appended to Claim 1:

provided that the peptide contains at least one amino acid selected from the groups consisting of:

A<sup>2</sup> is Aib, Acc, or Act;

A<sup>3</sup> is Dap(S(O)<sub>2</sub>-R<sup>10</sup>), Dab(S(O)<sub>2</sub>-R<sup>11</sup>), Glu(NH-Hexyl), or Cys(S-Decyl);

A<sup>5</sup> is Abu, Acc, Aib, Ala, Cha, Ile, hLeu, Nle, Nva, Phe, Tle, or Val;

A<sup>6</sup> is Abu, Acc, Act, Aib, Ala, Gly, Thr or Val;

A<sup>7</sup> is Dhyp, Dmt, 3Hyp, 4Hyp, Inc, Ktp, Oic, Pip, Thz or Tic;

A<sup>8</sup> is Acc, Aib, Arg, Asn, Asp, Dab, Dap, Gln, Lys, Orn, or HN-CH((CH<sub>2</sub>)<sub>n</sub>-N(R<sup>12</sup>R<sup>13</sup>))-C(O);

A<sup>9</sup> is Aib, Acc, Apc, 2Fua, 2Pal, 3Pal, 4Pal, Taz, 2Thi, 3Thi, or (X<sup>1</sup>,X<sup>2</sup>,X<sup>3</sup>,X<sup>4</sup>,X<sup>5</sup>-)Phe; and

A<sup>10</sup> is Acc, Aib, Asn, Asp, or Glu;

The above-reproduced *proviso* clause of Claim 1 clearly does not allow for Ser for A<sup>2</sup>, Ser for A<sup>3</sup>, Leu for A<sup>5</sup>, Ser for A<sup>6</sup>, Pro for A<sup>7</sup>, Glu for A<sup>8</sup>, His for A<sup>9</sup>, or Gln for A<sup>10</sup>, as in hGhrelin(1-28)-NH<sub>2</sub>. In view of the fact that the presence of hGhrelin(1-28)-NH<sub>2</sub> in Claim 5 causes improper dependency on Claims 1-4, it is respectfully submitted that deletion of hGhrelin(1-28)-NH<sub>2</sub> from Claim 5 in the present amendment is necessary and that all of the Examiner's objections and rejections are rendered moot in view of this deletion.

Claims 4-8 and 10-13 have been amended herein to provide sequence identifier , preceded by "SEQ ID NO:" in the text of the claims.

### **Response to issues relating to election/restriction**

On pages 2-3 of the instant Office Action, the Examiner stated:

A search was conducted for the elected species (Aib<sup>2</sup>, Glu<sup>3</sup>(NH-hexyl))hGhrelin(1-28)-NH<sub>2</sub>. This was found to be free of the prior art. In accordance with Markush practice, the prior art was extended to non-elected species and prior art was found that anticipate hGhrelin(1-28)-NH<sub>2</sub>, of claim 5. Claims 1-2 and 5 read on the elected species. Claims 3-4 and 6-13 are withdrawn from consideration. It is acknowledged that claims 3-4 and 6-7 have been withdrawn even though they contain the elected species. However, these claims also contain species that have not been examined. The MPEP states "If prior art is then found that anticipates or renders obvious the Markush-type claim with respect to a nonelected species, the Markush-type claim shall be rejected and claims to the nonelected species held withdrawn from further consideration. ... " For this reason, claims 3-4, 6-13 have been withdrawn as corresponding to non-elected species and claims 14-38 have been withdrawn as corresponding to non-elected groups.

It is evident from the above-quoted statement that the Examiner's decision to withdraw Claims 3-4 and 6-13 from consideration as corresponding to non-elected groups, is based on the fact that prior art was found that anticipates hGhrelin(1-28)-NH<sub>2</sub> of Claim 5. Applicants' undersigned attorney confirmed this fact with the Examiner during a telephone discussion which took place on March 25, 2008, wherein Applicants' undersigned attorney indicated that the presence of hGhrelin(1-28)-NH<sub>2</sub> in Claim 5 was unintentional, and inquired as to whether the Examiner would be amenable to expand the search if Applicants deleted hGhrelin(1-28)-NH<sub>2</sub> from Claim 5. Applicants' undersigned attorney recalls that the Examiner indicated that she would consider expanding her search to those claimed compounds having substitution at A<sup>2</sup>. Further, although the Examiner indicated that this telephone discussion did not amount to a formal telephone conference, she indicated that she would be agreeable to revisit this issue in view of the fact that hGhrelin(1-28)-NH<sub>2</sub> is clearly inconsistent with Claim 5's dependency on Claim 1-4 and Applicants' intention to delete it from Claim 5.

#### **Response to issues presented under 37 C.F.R. §1.821**

In the Office Action, the disclosure is objected under 37 C.F.R. §1.821, as failing to provide sequence identifier in the text of the description and claims. It should be noted, however, that Applicants previously amended the specification to provide such sequence identifier, together with a diskette containing a computer readable form of a Sequence Listing, and a paper copy of the Sequence Listing, as part of the National Stage Application Transmittal on January 21, 2005.

Nonetheless, in order to be fully compliant with the Examiner's requirement, Applicants have prepared an updated Sequence Listing, which includes a separate identifier to each of the 150 sequences disclosed, in comparison to the earlier-submitted Sequence Listing which includes a separate identifier to each of the 5 prior art sequences disclosed. Also, as indicated above, a substitute specification is provided herewith as a separate enclosure, and Claims 4-8 and 10-13 have been amended herein to provide sequence identifier, preceded by "SEQ ID NO:" in the text of the claims. Applicants respectfully request that the substitute specification replace all prior versions of the specification in the application.

**Response to issues under 35 U.S.C. §103**

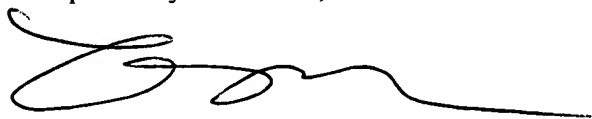
In the Office Action, Claims 1-2 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Matsumoto et al. (Biochem. & Biophys Researc Comm), which discloses the native human ghrelin, and the only difference between the reference and the instant application being that the reference does not specifically teach amidation of the native human ghrelin. As discussed above, Applicants have amended Claim 5 hereby to delete hGhrelin(1-28)-NH<sub>2</sub>. Accordingly, it is respectfully submitted that Matsumoto et al. is rendered irrelevant to the determination of obviousness under 35 U.S.C. §103(a).

Reconsideration and removal of the rejection under 35 U.S.C. §103(a) is respectfully solicited.

Examiner Gupta is invited to telephone Applicants' undersigned attorney at (508) 478-0144 to facilitate prosecution of this application.

Date: 5/27/2008

Respectfully submitted,



Tony K. Uhm (Reg. No. 52,450)  
Attorney for Applicants

Biomeasure, Incorporated  
27 Maple Street  
Milford, MA 01757-3650  
TEL.: (508) 478-0144